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BY J. W. NEVILLE.

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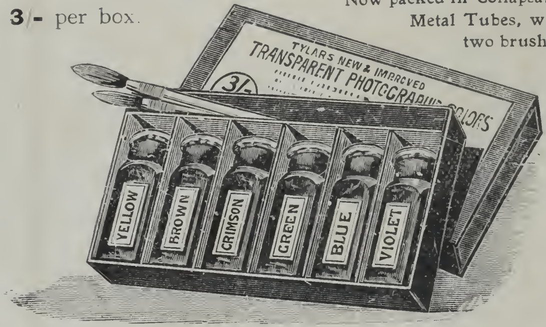

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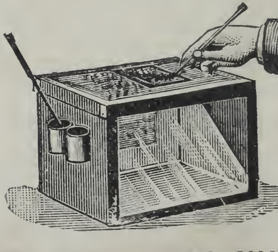

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THE

PHOTOGRAPHIC COLOURIST:

A MANUAL FOR THE USE OF AMATEURS.

GIVING EVERY PARTICULAR REQUIRED FOR PAINTING LANTERN SLIDES AND OTHER TRANSPARENCIES, COLOURING DIAGRAMS, PREPARING LANTERN SLIDES WITHOUT THE AID OF PHOTOGRAPHY, BLACKING OUT BACKGROUNDS, SCRATCHING IN DETAILS, TINTING PAPER PRINTS, COLOURING PAPER PRINTS TO IMITATE OIL PAINTINGS, CRYSTOLEUM PAINTING, ETC., ETC.

BY J. W. NEVILLE.

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BY
ILIFFE & SONS LIMITED, 3, ST. BRIDE STREET,
LONDON, E.C.

PREFACE.

IF dedications were not considered vulgar and out of date, I would dedicate this little volume to that great and constantly increasing army of photographers who love Nature for her own sake, and patiently labour to perpetuate in pictures her brightest and happiest smiles.

Many articles have been written upon the subject treated on in the following pages, and may be found locked up in the archives of photographic serials; but we believe this is the first attempt to present in a concise, practical, and complete form, full directions to accomplish all a photographer is likely to require. The subject is a large one, but has been reduced to its utmost simplicity, and shorn of all technicalities, and the writer flatters himself that the directions given are so precise and exact as to enable anyone, with care and judgment, to obtain considerable proficiency in this pleasing art. That this little book will bear abundant fruit, that mansion and cottage may alike be beautified with tinted photographs, and that many a village school will appreciate the lantern lecture of the amateur photographer, is the earnest wish of J. W. NEVILLE.

Handsworth, November, 1895.

PREFACE TO SECOND EDITION.

The fact that an edition of 5,000 *copies has run out and another called for* is sufficient evidence that a want was felt and has been supplied in these humble pages. An author could not hope for a more flattering compliment. His only aim was to make his little book thoroughly practical, and has considered its utilitarian qualities of more importance than mere literary merit.

J. W. NEVILLE.

Handsworth, April, 1900.

THIRD REPRINT, AUGUST, 1903

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THE
PHOTOGRAPHIC COLOURIST.

EVERY photographer who has looked on the focussing screen of his camera must have wished that the beautiful colours there displayed could be permanently fixed for future admiration. The chemistry of photography has not, however, as yet sufficiently advanced to secure so desirable an end. Still, the wish to see Nature copied in the profusion of her colouring is so strong that various methods of tinting have been resorted to to accomplish this end, all with more or less success. And we not uncommonly see photographs, particularly lantern slides, coloured by amateurs that have been completely spoiled, not through any inability, or lack of skill or patience on the part of the operator, but through a want of knowledge of the proper colours and materials to be used.

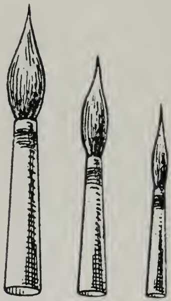
In the following pages we propose giving a few simple directions for colouring lantern slides, with a description of the colours, varnish, and brushes used—directions that the youngest amateur will have no difficulty in following with the slightest doubt of success. We may here say that artistic skill is not necessary in this work, Nature herself having given the form, light, and shadows of every object, and all the manipulator has to do is to carefully wash over the different parts with the desired colours to get the effect of a tinted slide. The colouring of lantern slides must not be looked upon as identical with painting photographs. If it is, the operator will be landed in confusion and failure, for, while the first is solely dependent on transparent colours for the desired effect, the latter may be worked up with solid or opaque ones. This will be readily understood when we remember that the first will only be seen by transmitted light, while the second is viewed by reflected light.

In these pages we purpose dealing first with lantern slides only, and shall simply mention the materials required for this work. First and foremost in importance we place the choice of colours, which are few in number, and are as follow:

Crimson lake.	Prussian blue.
Italian pink.	Verdigris.
Burnt sienna.	Burnt umber.

Of these the first four are beyond all doubt absolutely transparent, and the last two nearly so. The colours are ground in oil, and stored in collapsible tubes. The other materials that will be required are a small bottle of pale copal varnish, a bottle of turpentine, and two or three small brushes —one extremely small and fine, the second a little larger, and the third larger still.

Broad or large brushes are never required for this work. The slides being only 3¼ in. square, there is rarely a surface of any



particular size to cover. Our own experience suggests the following as the most useful sizes. We find camel-hair brushes answer every purpose. Sable would perhaps be still better; they cost, however, about ten times as much.

Having before us all the materials required, the next step is how to use them, Take a small palette (the back of a plate will answer every purpose). Take the screw top off one of the tubes required, and, pinching the opposite end, squeeze out a little of the colour on to the plate or palette. Have a small vessel to hold a little turpentine, and another about the size of a thimble to hold some copal varnish, and we are ready to make our first essay in the delightful task of colouring a lantern slide.

How to Mix Colours.

We have already said take a very little colour from the tubes at a time, for as it cannot be put back, if not used, it will soon spoil. Take one of the brushes, and, dipping it into the copal varnish, take a little out and mix into it some of the colour required, and commence painting the photograph. Care must be taken that the colour does not go over the edges of the parts coloured; for instance, the brown of a tree trunk must not go over its margin on to the blue sky, or the green of foliage on to the face of a figure. If it should it must be carefully wiped off with a piece of clean rag while the colour is wet, for if the picture is finished with these defects, though not strikingly apparent to the naked eye, yet when magnified by the lantern the picture will appear ill-defined and slovenly, and the colour would rather detract from than add to the value of a slide. This is the most useful method of mixing colours when only small surfaces have to be covered, for no two touches of colour have the same tone, and every degree of intensity being readily applied from its utmost strength to the faintest wash, so faint as only to show the merest tinge of colour. Now and then a case will occur when a flat wash is required, quite uniform in tone. This must be accomplished by mixing all the colour required at one time in the following manner: Squeeze out a sufficiency of colour, and mix it into copal varnish with a palette knife on a palette, or the back of a plate, giving the knife a rotary motion.

When the required tint is obtained it will be uniform through the whole mixture, and the colour will be of one tone if laid on nice and evenly, whether the surface is an inch or a yard square. A difficulty is, however, often experienced by the amateur in getting a coat of

Colour Smooth and Even.

It will sometimes, by capillary attraction, gather up into a ridge round the margin of the coloured space, and at other times look rough and scratchy, as if put on with a cat's claws. The reason of these two difficulties —difficulties which most amateurs must be familiar with—is found in the condition of the colours used. In the first case the colour is too thin, and in the last too thick; a happy medium must be chosen, when the colour will float level—it will not be thin enough to gather into a ridge, or so thick as to require "dragging" on with a brush. If this medium degree is adhered to, few or no difficulties will be experienced in getting every coat of colour nice and even. Of course, ordinary care must be taken that the brushes are clean and free from lint, and the slides must be painted in a room free from dust, and, when finished, should be covered over to keep dust from them. If this precaution is not taken, atoms of smut and dust will settle on the wet surface of the paint, and adhere to it, and when the picture is projected on the screen, these particles will make themselves visible. A smut on the sky may look as large as a rook, though not so shapeable, and prove fatal to an otherwise carefully painted slide.

How to Use Colours.

Sometimes it will happen that the colours will get thick, and will not work well; when this is the case, a little turpentine will thin them. They should always be mixed, so that they will work nice and freely in the brush. If you wish to use a different colour in the same brush, it must be washed out in turpentine until it is clean and wiped on a piece of rag. Another colour may then be used, and so on, until all the tints are filled in. So far, our task appears simplicity itself, but, unfortunately, the subject is a little complicated by the fact that the colours described above are rarely required in their crude or pure state. For instance, the intense crimson of the lake will rarely be used in its purity, being only suitable for a richly-coloured dress, or some similar purpose. The same remark will apply to the blue and other pure colours. Brilliant and intense colours are rare in nature; it is true we see them in golden sunsets, flowers, and some insects, but, generally, the colours most serviceable are sober and neutral in their tones, and have to be made by mixtures of the foregoing ones. This brings us to the most important and technical part of our subject, namely,

Gradations of Tone.

These are made by mixing two or more colours together, and so altering the tone of both. The more important mixtures will be the following:

Greens.

These can be made of every tone, from the coldest and crudest colour, through an intensely brilliant one, to a yellowish warm green by the mixture of verdigris and Italian pink (this name is a misnomer, as it is not a pink at all, but a transparent yellow). Where brightly coloured greens are required, take a little of these two colours from the tubes, and, thinning out the verdigris with varnish, put a few touches on your picture if such a cold raw green should be required, which is very doubtful. This must be used very sparingly. Now add to it a little Italian pink, when it will begin to assume a brighter and warmer tone;

continue the green in your picture, softening the latter into the former tones; still add more of the last colour, making the green warmer and warmer still. In this way a great many tones may be made, and, when used judiciously, have a pleasing, brilliant, and lifelike appearance. So far, our greens are only suitable for bright colouring, such as the foliage of flowers and the foreground of landscapes. We frequently require greens of a less intense and more neutral tone; these we get by putting in a touch of burnt sienna. This colour requires to be used with considerable care, always much thinned out with varnish, as it is not absolutely transparent. A little of this colour gives to the green a warm and fulvous tone, making it very suitable for tree work in landscapes, and as the quantity of verdigris is diminished, the Italian pink and burnt sienna will make it assume a warmer, brighter, and more autumnal tone. Nothing is less pleasing to the eye than a picture in which foliage predominates which is coloured with a few tints of green. If the greens are bright, it lacks distance; if faint, it lacks the force of a foreground. Nature is lavish of colour, and a trained eye will see many tints where an untrained one sees few. Broad flat washes of colour are both displeasing and unnatural.

We have already described many tones of green, but they may be enormously increased by the substitution of Prussian blue for verdigris, the other colours (Italian pink and burnt sienna) being used with it the same as before. Greens made in this way are among the most useful for general work. They lack the intensity and brilliancy of the others, but are more suitable for general landscapes, as they can be made fairly bright, even for foregrounds. With a little less Italian pink they will do for middle distance, and with less still, for the bluish distance, always so pleasing to the eye.

We have dealt at considerable length on the various tints of green, and how to make them, for reasons that will be obvious to the amateur; no other colours being so widely distributed or partaking of such a profusion of tones—tones that pass by easy and almost imperceptible gradations from the bright grassy tints of the sunlit foreground, through the sober half-tones of the middle distance, into the greenish greys and purples of the far distance.

We now come to

Red.

The mixtures of crimson lake are less important. As before stated, in its pure form it will be seldom used, and then only in small quantities, but thinned out with varnish into a delicate pink, or mixed with other colours, it serves many useful purposes. When mixed with Italian pink it produces orange, and this colour can be made of any degree of intensity; a preponderance of lake making it almost crimson on the one hand, and an excess of Italian pink yellow on the other, so that every gradation of tone can be made between these two by altering the proportions of the colours used. Orange is so bright that it will be rarely required in lantern slide work. It would be all-important for a golden sunset, a ship on fire, or an active volcano; but would be seldom called for in the ordinary class of views a photographer delights to take.

Purple.

Crimson lake can be made very useful when mixed with blue, forming purple. It is not a pure purple. This is somewhat regrettable, but cannot be helped. It is a colour, however, which is rarely required. This is perhaps fortunate. Its use is chiefly in giving warmth to a blue sky, or distant colour to a mountain; the purple made by this mixture is sufficiently good for both these purposes. These are the chief tints we shall require, but sometimes

Greys

are very useful. These are made with a mixture of crimson lake, Italian pink, and blue, in different proportions, according to the tone required. If the lake predominates, the grey will be of a warm tone; if blue, it will be cold; if blue and Italian pink, then it will be greenish—either a bluish or yellowish green, according to the excess of either colour. We have now only two colours to describe.

Burnt Umber

must be used with great care, as it is not so transparent as we could desire, but when well thinned out with copal varnish it answers every purpose. A brown is necessary for many purposes, and we select this as the best. It is useful for tree-trunks, ploughed fields, dark stone buildings, foregrounds, etc. The ordinary observer will, however, see that this must not be a hard and fast line, for some ploughed fields have a red soil that can best be imitated by another colour; and some tree-trunks are nearly white, as the silver birch; these must be washed with a delicate grey.

When the brown required is reddish—for clayey or sandy soil—

Burnt Sienna

may be used, taking care to thin it out, as the last colour, for the same reason.

We have only now to give a few

General Directions.

It is a good plan to begin colouring a lantern slide from the top where practicable. In an ordinary slide this will be a sky. The aim of the manipulator should always be to imitate nature as closely as possible. Care must be taken that the wash is not even and uniform in colour, because we do not find it so in nature. If the sky is blue, it will be greyer and less intense towards the horizon. If an evening effect is desired, a little yellow or pink, or both, must be laid on the lower part of the sky, and nicely softened into the blue. It is needless to say that if white clouds are required, they must be left without any colour at all, and all high or white lights must be treated the same. When we come to the more distant parts of the view, such as mountains and distant trees, we must fill them in with purples, greys, and other neutral colours, gradually getting to more positive tints as we get to nearer objects, but when we come to the foreground we can use the brightest colours of all. This will give the effect of nearness, particularly when the eye contrasts them with the purples and greys that give a misty and atmospheric effect to the upper part of the picture. The photographs most suitable for colouring are those that are bright, sharp, and clear. An ill-defined one never colours well. A picture belonging to the "fuzzy" school would be extremely difficult to manipulate, and unsatisfactory when finished.

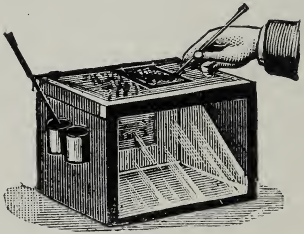
Stippling Skies.

One of the most difficult things to do in painting transparencies is to get a really satisfactory sky. If the sky is cloudless, or the clouds are of an uniform colour, then the difficulty is reduced to a minimum; but a blue sky, with brightly lighted cumulus clouds, is as difficult to imitate as it is to photograph. We have seen good results obtained by stippling the colour with the end of the finger. It is done as follows: We will suppose the sky desired is a blue one, with bright cumulus clouds, softening into grey as it nears the horizon. Give a nice transparent wash of blue over the upper part of the picture, leaving the parts representing the clouds quite clean of colour. Next wash on the grey or greys, if there should be more than one tone, and then, with the end of the finger, carefully dab or stipple the blue into the white ground, and the grey also into the white. In this way a degree of softness may be obtained unattainable in the usual way. Some prefer to use a small dabber made of cotton-wool, and some good results are obtained in this way; but, from practice, we prefer the finger end, as the other method is apt to leave a granular appearance on the slide that is not pleasing to the eye when magnified, and without great care cotton fibres will sometimes become embedded in the colour, still further marring it. For this reason we recommend the first mode of treatment.

Painting Desk or Table.

In painting a transparency it is necessary to be constantly holding it up to the light to see the effect of the tints, as they do not show properly if laid flat, even though a piece of white paper is placed beneath them. In this way much valuable time is lost—time that could be better utilised if some method was adopted to render this unnecessary. It is with this object in view that the painting table has been invented; and in use will be found a great time saver, as it will always allow the picture to appear illuminated in the same manner as if held up to the light.

It consists of a box with an open end and a glass top; underneath the glass top a looking-glass is placed at an angle of 45°. When this box or painting table is opposite a window, the looking-glass receives the light and reflects it through the picture



in such a manner that the operator can see exactly what progress he is making with his work, and how the tints harmonise, without removing the picture from the table. We append a drawing of this useful accessory.

What Colour should we paint Water?

Some good pictures are often spoiled by inattention to this part of our subject. Everyone who has used his eyes will have seen that water has no colour of its own, and that all the colours seen in water are reflected tints of other objects. If a smooth lake, having no shadows on its surface, appears in a picture, the colour would be derived from the sky reflected in it, and coloured accordingly; but if shadows appear on the surface, then the colours of the shadows would be the same as the objects making them, but a little less intense. For instance, a reflection of a mountain in a lake would be very near to the colour of the mountain itself. The deep shadows under trees would partake of the colours of the foliage, either green or brown. The colour of a building reflected in the water would be very nearly reproduced. A soldier in a scarlet uniform would make a red reflection, and should be coloured so; but as water does not reflect the whole of the colour, there should be a little less intensity in the reflection than in the objects themselves.

Colouring Diagrams.

Diagrams are generally coloured for educational purposes rather than for natural effects. This part of our subject will be found most useful in photomicrography, and the colours must be used to differentiate one part from another. In this branch it does not much matter what colours are used, so that they are chosen to give unmistakable effects. Suppose we have an enlargement of an anatomical preparation to show veins and arteries, we should colour the veins blue and the arteries red, taking great care that we did not confuse them, for if diagrams are not carefully coloured they are of little educational value. In a vegetable section, such as a stem, the cellular and vascular structure should be coloured differently, say one pink and the other blue, and the pith and cambium cylinder should be other two colours, say yellow and green, so that, if used in a lecture, the speaker can at once point out a particular structure by its colour on the screen. The importance of exactness in diagram colouring cannot be over-estimated. It answers the same purpose as the colouring of a map. A map of the world should show our own country and its dependencies in one colour. The same with others. If this is carelessly executed, we should appear to have possessions where we have none, and others would seemingly have them where they would be likely to be disputed.

Drawing Lantern Slides without the Aid of Photography.

It often happens that lantern slides are required of objects that are extremely difficult to photograph. It therefore becomes a necessity to prepare them by hand. If a person is a clever draughtsman and a skilful colourist, this is a small matter to face; but as most people are too much occupied in the humdrum of life to be able to acquire this degree of proficiency, we give a simple method of preparing them, requiring neither expense on the one hand nor artistic skill on the other. Procure a number of lantern slide glasses, and rough them with emery until they look like ground-glass all over. If it is preferred, they can be purchased; but in this little book we deal practically with the subject throughout, and the operator will find no difficulty in roughing his own if he proceeds as follows: Take one of the glasses, lay it flat upon the hand, sprinkle it with water, dust it over with flour emery (that is the finest), place another glass upon the top, and rub them together with the palms of the hands. In a few minutes separate them, wash in water, and see if they are rough or "dead" all over. If the glasses are flat, they will be roughed directly, but if there should be any irregularities in them they take longer. When they are "dead" all over one side, wash and wipe with a clean cloth, and store for use. By grinding them in this way, we do two with one trouble. We prefer roughing our own, doing, perhaps, twelve or more at a time, that we may have a few by us when required.

We will suppose we are now ready to make our first essay at a hand-painted slide.

Take one of the roughed glasses, and carefully make a fine outline of the object desired. This must be done with the sharp point of a blacklead. We use H and HH, and find them admirable. They must be kept to a sharp point. If they get blunted, as they soon will do with wear, they must be frequently sharpened, for the objects we are drawing will be magnified very many times, and must be neatly drawn. If the operator has a drawing or illustration he wishes to copy, he can lay the glass upon it and trace it, the same as a child would on a transparent slate. When the outline is complete, and quite satisfactory, we proceed to the shading. If the outline is not satisfactory, it can be wiped off with a damp cloth, and recommenced. When the shading is nicely filled in, we can commence the colouring, working exactly the same as if it was a photograph. Upon the completion of this process, we put the slide on one side to dry. When dry, we take a brush, dip it into copal varnish, and give the slide a thin coat all over the rough or "dead" surface. This coat will gloss the slide all over, the rough or dead surface will have disappeared, and the glass will be as clear and transparent as it was before grinding, and the object will stand out, in colour, light, and shade, from the glass.

Blacking out Backgrounds.

In the preparation of slides it is often necessary to black out the backgrounds. This is especially necessary in the photomicrographs, more particularly of scientific subjects, and whether the slides are drawn by hand or photographed the process is the same. This mode of treatment is very desirable in such subjects as slides of insects, or parts of insects, minute shells, desmids, and diatoms, etc. But it is by no means confined to photomicrography, for statuary lends itself admirably to this mode of treatment, so much so that few who have seen it on a screen in this way would care about showing it in any other. The process is as follows: Procure a little lampblack from any colourman's (we do not recommend tube colour for this purpose). take a little of the powder, and lay it on a palette or the back of a plate, add a few spots of turpentine, and with a palette knife grind it fine, then add a few spots of copal varnish, well mix it up, and it is ready for use. If you require a dead solid black, put in a very little varnish; if a bright shiny black, then more varnish. Now take a fine brush and go carefully round the margin of the object; when this is done, a larger brush may be employed to fill in the background. All slides are not adapted to this mode of treatment, but those that are are much improved by it, for when thrown upon the screen they stand out in bold and vigorous contrast from the black background.

Sometimes a number of fine lines exist in a picture that no hand is steady enough or brush fine enough to go round. In these cases the lines may be covered over, and when the black is dry, say in a few hours, they can be scratched in with the point of a needle—a fine one if the lines are fine, or a darning-needle if they are required of greater strength. In this way some exceedingly good effects are produced with a minimum of labour.

Colouring Paper Photographs.

Before we commence work of this kind, we shall require an addition to the six colours already described; these will all be opaque.

Additional Colours.

Flake white.	Chrome yellow (pale).
Vermilion.	Chrome yellow (deep).

It must be distinctly understood that these colours will not do for painting transparencies; that is our reason for introducing them here. The photograph will require a little preparation before it is painted. If this is neglected, the oil colour will soak into the paper and give it a black and greasy appearance.

Preparation of Photograph.

Take the paper print and soak it for a few minutes in tepid water, then transfer it to a solution of starch, and let it remain for a short time, then take it out and lay it on a piece of smooth and stout cardboard, wipe the superfluous starch from the surface, and place it on one side to dry. The cardboard will keep the picture flat, and the starch will fill up the pores of the paper. When quite dry, the painting may be proceeded with as follows:

Tinting Photographs.

If it is only desired to tint the picture with washes of colour, exactly the same directions may be followed as those given for painting lantern slides, the operator being scrupulously particular to use only transparent colours. To our mind, paper prints are very unsatisfactory when coloured in this way, and this mode of treatment gives no advantage over water colours.

The weak point of photographs coloured in this way is found in the high lights, for they lack the sharpness another mode of treatment would give. A white dress, for instance, well lighted, would not look sufficiently white if only the paper surface was left. We would therefore recommend a different mode of treatment, and one that would give the finished picture the appearance of an oil painting.

It is not an uncommon thing to see painted photographs sold at picture sales as oil paintings, and only an adept can tell the difference without very close scrutiny; and for our own part, we should vastly prefer a picture of this description to one painted entirely by hand, unless it was of a high order, for the drawing of the photograph would be perfect, and the colouring might be good; but a cheap figure picture, in which the drawing is weak and defective, is simply execrable.

Colouring Paper Photographs to resemble Oil Paintings.

Prepare the photograph as the last, and, when dry, proceed as follows: Take transparent colours, and pick in all the tints required, leaving all the whites quite plain. If the picture is darkly printed, the colours may be made only semi-transparent by the addition of a little flake white, or, if the colour is lake, by a little vermilion. Care must, however, always be taken never to lose the lights and shadows of your picture. If once these are lost, all the advantages of the photograph are gone, and if the lights and shadows are to appear, they will then have to be painted in by hand, and might just as well have been painted in the first instance without the aid of photography. As we have said in an earlier part of this volume, a photograph gives us the drawing, lights and shadows. Not one of these three features must ever be lost; we may modify them, heighten the lights, or deepen the shadows, but never lose them. In making any colour less transparent by the addition of an opaque colour, this must be watched carefully as a matter of supreme importance, for the success or failure of an early attempt will largely depend upon it. Sometimes certain colours come out very dark in a print, occasionally almost black. If a perfectly transparent colour is laid on this, it will also appear black. These are the parts of a picture that have to be humoured by semi-opaque colours, which are usually made by the addition of a little white, using only as much as will give the required tone, and not sufficient to destroy the shade. When the picture is coloured to the required degree, with transparent and semi-transparent colours, we proceed to give the final touches that will give the work a finished and natural appearance. This is done with opaque colours. Wherever a bright light falls we shall have in the picture vivid illumination. If there should be a white dress, we must put some bright lights of flake white where the high lights appear, taking care not to obscure the shades that give grace to the foldings of the fabric. Similar lights must also be given to other parts of the picture, the colours being chosen as most suitable for the parts on which they are to appear; for instance, a red uniform coloured with lake may be lighted with vermilion, a blue jacket with light blue, that is, blue and white mixed. But too much lighting must not be indulged in, however tempting the use of these bright colours may be. The photograph will always show where the lights should come, and the amount of them; this cannot be exceeded without impairing the picture. The use of the chromes will be to give high lights to yellow objects of different tones, and to make greens when mixed with Prussian blue, pale chrome making a bright intense green, and deep chrome a more subdued and neutral one. When the lights are put on with softness and taste, the picture is finished, and can scarcely be told from an oil painting.

Crystoleum Painting.

Everyone, whether a photographer or not, must have admired the crystoleum paintings that have from time to time adorned the walls of exhibitions, presenting as they do a marked difference from anything of a similar kind. The question is often asked, "How is it done?" and we do not doubt but that many with time and patience will master the few details and produce attractive and beautiful work.

The first thing will be to procure crystoleum glasses. They are usually sold in pairs, a front and a back one, at any photographic material dealer's. To

Put the Picture on the Glass,

proceed as follows: Steep the photograph in starch solution until it is thoroughly permeated, then take it out and lay it face down on the concave side of the glass, and squeeze all air-bubbles to the outside, and all the starch that can be got by pressure from under the picture. It is imperative that no air is left under it, or it will show in bright silvery looking bubbles. When this is done, and the superfluous starch removed from the back, it should be placed on one side to dry.

Removing Paper from the Print.

When the picture is quite dry, procure some fine glass-paper, No. o or oo (the last is the finest made), and carefully rub the paper from the photograph. This will take some little time, for it has to be done evenly and with care, or there is a liability of rubbing the picture through and causing a hole; this must be avoided. It can be looked at from time to time by holding it up to the light, when the paper will show where it is thinned down by the rubbing. This must be continued until the merest film of paper protects the printed surface. This nice degree of thinness takes patience, but patience brings its own reward. The glass-paper used, especially for the finishing, should be so fine as to leave no scratches on the paper surface, for they are very difficult to hide.

To Render the Picture Transparent.

Take a little raw linseed oil, and pour it upon the rubbed surface of the picture so as to cover it, and leave to soak for a few hours, or all night. When this is done, pour the oil back into the bottle, wipe the photograph with a piece of clean rag, and it is ready for the colouring.

To Paint Crystoleum Pictures.

The process is the same as painting an ordinary photograph (not a transparency), transparent and opaque colours being used, but the method is reversed, that is, the last colours put on a photograph would be the first put on crystoleum work — for this reason, an ordinary picture is looked at on the painted side, a glass picture the opposite way. Consequently, the high lights must be put on first, the middle tint next, and the general background last. If it is a figure picture, we should paint in the eyes first, eyebrows next, then the lips and colour in cheeks, and last the general flesh colour of the face and neck. With regard to the dress, if there should be any ornaments, such as a brooch, flowers, or ribbons, they should be painted in first, to make sure of them showing up well on the dress. Next, the high lights, and then the general ground colour of the dress.

If a second glass is used, it must be with an idea of its use, or else it will be thrown away. Suppose the picture is of a lady leaning against a stile, with a rural background; the lady, stile, and foreground should be coloured on the front glass, and the sky and distance on the back glass. This gives depth to the picture, and causes the figure to stand out from the background in a very pleasing manner.

All pictures do not lend themselves advantageously to this mode of treatment, and if they are to be seen in their full beauty, considerable judgment must be exercised in the choice of a subject. Pictures in which figures occupy the foreground stand pre-eminent for this kind of work. All skies should be painted in with opaque colours (of course, we except transparencies). It will be found that oil colours take longer to dry on glass, as there are no absorbent properties in it; but a few days are quite sufficient for the most obstinate colours.

We feel that our task has now drawn to a close, but we cannot leave the subject without a few

Final Words.

Be scrupulously clean in the use of colours, brushes, and turpentine. Wash the brushes in turpentine, and wipe them dry on a piece of rag before they are put away. Do not put one colour on the top of another until the first one is set.

If this is done, and the above directions followed, they will be found clear, concise, and practical, and will place the feet of the amateur on the rungs of the ladder that will lead to undoubted success. We have not denied that the operator will find difficulties, but we have not exaggerated them, for we fully believe a careful perusal of the pages of this little book will smooth a stony path, and remove many a stumbling block over which the inexperienced would assuredly fall.

The first picture may not be so good as the second, but a little patience and practice, and attention to the foregoing directions, will introduce the student to one of the most delightful and entrancing pursuits associated with the universal art of photography.

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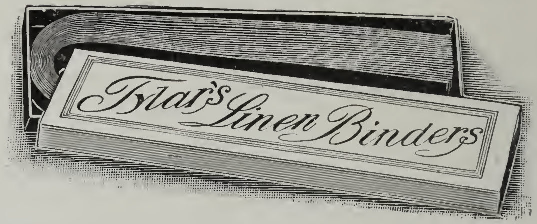

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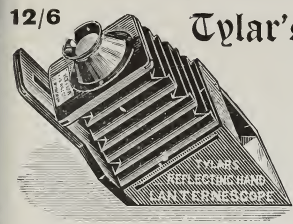

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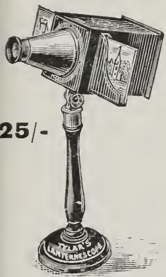

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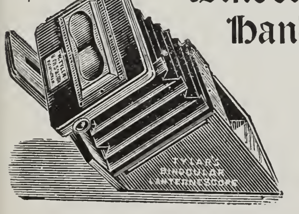

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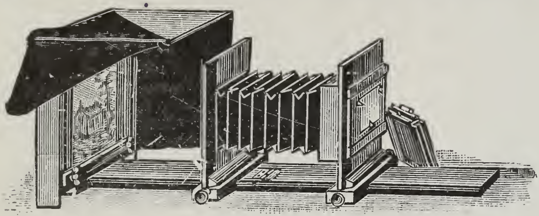

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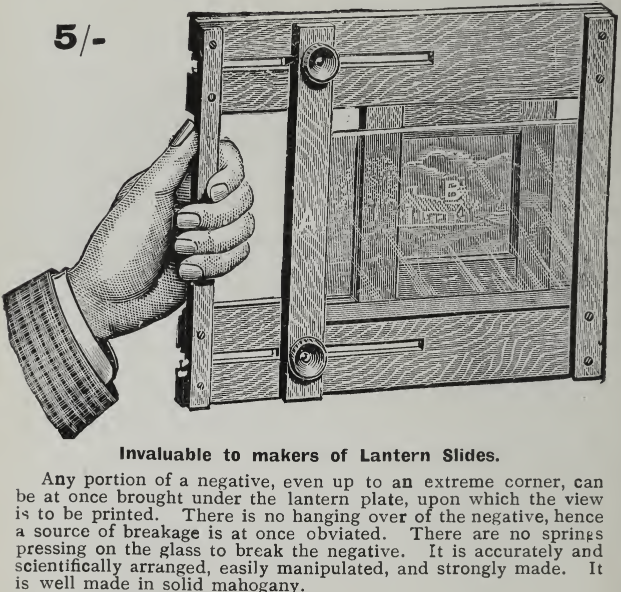

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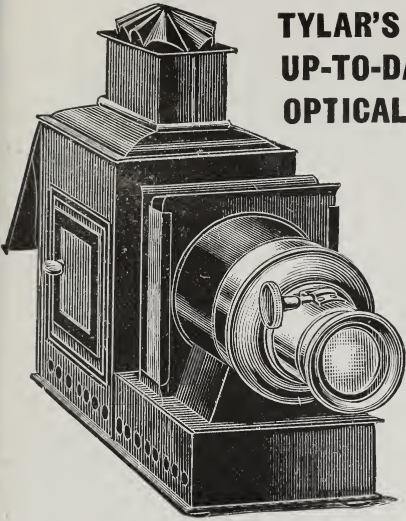

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